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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,790	12/09/2003	Michael Kilian	E0295.70190US00	4910
46630 7590 08/04/2008 EMC Corporation c/o WOLF, GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206				
EXAMINER WONG, JOSEPH D				
ART UNIT 2168		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/731,790

Applicant(s)

KILIAN ET AL.

Examiner

JOSEPH D. WONG

Art Unit

2168

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-78 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 66-78 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CS-100)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 20050419

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 21 May 2008 and 22 Feb 2008 have been entered.

Drawings

Figures 1-3 appear informal with respect to 37 CFR 1.84. Fig. 1 uses different reference numbers for what appear to be the same element labeled "Host". Fig. 2 reuses item 203 for what appears to be the same element used repeatedly. There is a spelling informality in Fig. 2, item 205. Fig. 3 lines associated with reference numbers and elements appear combined. Appropriate clarification or correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 70-74 are rejected for invoking coverage of multiple statutory classes.

Specifically claim 70 recites phraseology of "computer readable medium", "computer system" and "the method". See MPEP 2173.05(p)(II).

Claims 75-78 are rejected for appearing to invoke coverage of multiple statutory classes. Specifically claim 75 recites phraseology of "storage system", "storage device", and "storage medium" and steps of "receives a request...determines" without clarifying the category as being a product, system or method. Also it is unclear whether any instruction or method step may also be directed to a software element requiring a functional hardware element for the function to be operable. Claims 76-78 depend from claim 75. Appropriate correction or clarification is requested. See MPEP 2173.05(p)(II).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 70-78 are rejected for being directed towards nonstatutory subject matter.

Claim 70 is directed at least one computer readable medium encoded with instructions. The Instant Specification paragraph [20] exemplifies that this product includes "one or more segments of transmission media on which communications may be exchanged between the devices... Each segment may be any of a plurality of types of transmission media, including one or more electrical or optical wires or cables made of metal and/or optical fiber, air (e.g., using wireless transmission over carrier waves) or any combination of these transmission media". As such the invention is drawn to a signal which is considered a form of energy. This description is evidence that the medium

Art Unit: 2168

includes signals and as such the claimed invention is drawn to a form of energy. Energy is not one of the four categories of invention and therefore **claims 71-74** are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article and as such is not a machine or manufacture. Energy is not a combination of substances and therefore is not a composition of matter.

Claim 75 recites a system claim that appears inoperative because it appears to recite method or instruction steps without a functional element within an operable computer such as a processor. Therefore **claims 76-78** are rejected as depending from claim 75.

Applicants can look to MPEP 2106.01-2106.02 (September 2007), Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Instant Specification, and contemporary case law with a matching fact pattern for further suggestions that may be helpful in overcoming these rejections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 65-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuart et al., (US 2005/0055519), hereinafter Stuart in view of Cossey et al., (US 2004/0070622), hereinafter Cossey.

Regarding claim 65, Stuart teaches a method for use in a computer system comprising at least one host and at least one storage system, the method comprising acts of: (A) receiving a request, from the host, to delete a unit of content stored on the storage system (See paragraph [0020], Figs. 4 & 9), (B) determining whether previously-defined retention period for the unit of content has expired; (See paragraph [0020], Figs. 4 & 9) (C) when it is determined in the act (B) that the retention period for the unit of content has not expired, denying the request to delete the unit of content (See paragraphs [19-20], Fig. 9); and (D) when it is determined in the act (B) that the retention period for the unit of content has expired, directly deleting the unit of content in response to the request. (See paragraphs [93-94], Fig. 9).

Stuart does not explicitly teach wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period;

However, Cossey teaches wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period; (paragraphs [32, 52])

Stuart and Cossey are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Stuart and Cossey because it

provides for duplicating user selections using fewer actions than are required by conventional editing functions as discussed in paragraph [9] of Cossey.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Stuart and Cossey because it provides for duplicating user selections using fewer actions than are required by conventional editing functions as suggested in paragraph [9] of Cossey.

Regarding claim 66, Stuart teaches the method, wherein the acts (A), (B) and (C) are performed by the storage system. (See paragraphs [7, 22-24]; Fig. 1).

Regarding claim 67, Stuart teaches the method, further comprising an act (D) of, prior to performing the acts (A), (B) and (C), receiving information specifying the retention period for the unit of data. (See paragraphs [32-33], Fig. 4).

Regarding claim 68, Stuart teaches the method, further comprising acts of, prior to performing the acts (A), (B) and (C):
(D) receiving the unit of data at the storage system (See paragraphs [7, 39-41]); and
(E) writing the unit of data to the storage system. (See paragraph [8]).

Regarding claim 69, Stuart teaches the method, further comprising acts of, prior to performing the acts (A), (B) and (C):
(F) receiving information specifying the retention period for the unit of data along with the unit of data; and (Paragraphs [32-33], Fig. 4)
(G) writing the information specifying the retention period to the storage system. (See Paragraphs 32-42).

Regarding claim 70, Stuart teaches at least one computer readable medium encoded with instructions that, when executed on a computer system, perform a method

Art Unit: 2168

for use in the computer system, wherein the computer system comprises at least one host and at least one storage system, and wherein the method comprises acts of

(A) receiving a request, from the host, to delete a unit of content stored on the storage system (See paragraph [0020], Figs. 4 & 9); (see paragraph [20], Figs. 4+9)

(B) determining whether previously-defined retention period for the unit of content has expired; (see paragraph [0020], Figs. 4 & 9)

(C) when it is determined in the act (B) that the retention period for the unit of content has not expired, denying the request to delete the unit of content (see paragraphs [19-20], Fig. 9); and

(D) when it is determined in the act (B) that the retention period for the unit of content has expired, directly deleting the unit of content in response to the request. (See paragraphs [93-94], Fig. 9).

Stuart does not explicitly teach wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period.

However, Cossey teaches wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period. (paragraphs [32, 52])

Regarding claim 71, Stuart teaches the at least one computer readable medium, wherein the acts (A), (B) and (C) are performed by the storage system. (See paragraphs [7, 22-24]; Fig. 1).

Regarding claim 72, Stuart teaches the at least one computer readable medium, further comprising an act (D) of, prior to performing the acts (A), (B) and (C), receiving information specifying the retention period for the unit of data. (See paragraph 52, ““user specifying three (3) days in the history retention section 425... restricts a set of recorded target destinations to those occurring within the last three (3) days”).

Regarding claim 73, Stuart teaches the at least one computer readable medium, further comprising acts of, prior to performing the acts (A), (B) and (C): (See paragraphs [32-33], Fig. 4)

(D) receiving the unit of data at the storage system (see paragraphs [7, 39-41]); and
(E) writing the unit of data to the storage system. (See paragraph [8]).

Regarding claim 74, Stuart teaches the at least one computer readable medium, further comprising acts of, prior to performing the acts (A), (B) and (C):
(F) receiving information specifying the retention period for the unit of data along with the unit of data; and (Paragraphs [32-33], Fig. 4)
(G) writing the information specifying the retention period to the storage system. (See paragraphs 32-42).

Regarding claim 75, Stuart teaches a storage system for use in a computer system comprising at least one host and the storage system, the storage system comprising: at least one storage device, comprising at least one physical storage medium to store data received from the at least one host (See paragraph [0020], Figs. 4 & 9); and

Art Unit: 2168

at least one controller that; receives a request, from the host, to delete a unit of data stored on the storage system (See paragraph [0020], Figs. 4 & 9), wherein a previously-defined retention period for the unit of content is stored in the unit of content, determines whether the previously-defined retention period for the unit of data has expired; when it is determined that the retention period for the unit of data has not expired, denies the request to delete the unit of data (See paragraphs [19-20], Fig. 9); and when it is determined that the retention period for the unit of content has expired, directly deletes the unit of content in response to the request. (See paragraphs [93-94], Fig. 9).

Stuart does not explicitly teach wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period.

However, Cossey teaches wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content, and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period. (See paragraphs [32, 52]).

Regarding claim 76, Stuart teaches the storage system, wherein the at least one controller receives information specifying the retention period for the unit of data. (See paragraphs [7, 22-24]; Fig. 1).

Regarding claim 77, Stuart teaches the storage system, wherein the at least one controller receives the unit of data and writes the unit of data to the at least one storage device. (See paragraphs [32-33], Fig. 4).

Regarding claim 78, Stuart teaches the storage system, wherein the at least one controller receives information specifying the retention period for the unit of data along with the unit of data and writes the information specifying the retention period to the at least one storage device. (See paragraphs 32-42).

Response to Arguments

Arguments are considered but are not persuasive.

Rejection under 35 U.S.C. §101

Rejections under 35 USC 101 for claims 70-74 are maintained. Paragraph [20] of the instant specification as published appears to disclose examples of computer readable mediums as transmission media. This paragraph refers to Fig. 1, item 103, a network which is considered within the art to be a functional equivalent to a computer readable medium. Therefore claims 70-74 stand rejected.

Although the software per se aspect of the reject in claims 75-78 are overcome, rejections under 35 USC 101 of claims 75-78 are reiterated under different reasoning of being inoperative due to a missing element because claim 78 recites a storage medium but not operative element for the instructions or steps further recited. Extrinsic evidence of Oxford English Dictionary of a storage device being merely the non-destructive read out of stored data. A variable or symbol or paper also perform the function of a storage device as instant specification paragraph [21] as published recites that "may be any device that is capable of storing and retrieving data" meaning that that the data is not

Art Unit: 2168

necessarily stored but is capable of it. Paragraph [21] optionally adds that the device "may be a device that performs a variety of other functions, such as executing user applications" thereby causing confusion whether a processor is necessarily present or not. Therefore claims 75-78 stand rejected.

Rejection under U.S.C. §103

On page 9, paragraph 3, Applicant requests clarification as to what the Examiner has mapped the content unit that stores, the retention period of three days. However Cossey teaches in paragraph 52, "user specifying three (3) days in the history retention section 425... restricts a set of recorded target destinations to those occurring within the last three (3) days". Therefore independent claims 65, 70, and 75 stand rejected.

On page 9, paragraph 5, Applicant requests clarification as to what the Examiner has mapped the content address and from what content believes this content address is generated. However, Cossey teaches in paragraphs 33-34, the user selection is placed via "paste where" function in a temporary storage location, like a clipboard and the use of a pointer and location in **"user selection is placed in a temporary storage location, like a clipboard"** which implies the use of an address in the form of a clipboard. Therefore independent claims 65, 70, and 75 stand rejected.

For at least the reasons above, all pending claims stand rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Wong whose telephone number is 571-270-1015. The examiner can normally be reached on Mondays through Fridays from 10 AM – 6PM.

Applicant initiated interviews may be formally requested in advance by faxing a completed PTO-413A form to the Examiner's personal fax number at 571-270-2015. Form PTO-413A is used by the Examiner to prepare for any proposed interview. A detailed agenda listing should be attached including any proposed claim language and/or arguments that will be presented. This form is used to determine whether any proposed interview would advance prosecution and fit within a prescribed time limit.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2168

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit
2168

Joseph D. Wong
TTV/jdw
/JDW/
4 August 2008

Tim T. Vo
SPE, Art Unit 2168